

Sequence Listing

<110> Baker, Kevin
 Botstein, David
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 Filvaroff, Ellen
 Gerritsen, Mary
 Goddard, Audrey
 Godowski, Paul
 Grimaldi, Christopher
 Gurney, Austin
 Hillan, Kenneth
 Kljavin, Ivar
 Napier, Mary
 Roy, Margaret
 Tumas, Daniel
 Wood, William

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35 40 45
Asp Asp Asp Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu
50 55 60
Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro
65 70 75
Phe Gly Cys Gln Cys Tyr Ser Arg Val Val His Cys Ser Asp Leu
80 85 90
Gly Leu Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met
95 100 105
Leu Asp Leu Gln Asn Asn Lys Ile Lys Glu Ile Lys Glu Asn Asp
110 115 120
Phe Lys Gly Leu Thr Ser Leu Tyr Gly Leu Ile Leu Asn Asn Asn
125 130 135
Lys Leu Thr Lys Ile His Pro Lys Ala Phe Leu Thr Thr Lys Lys
140 145 150
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155 160 165
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170 175 180
Lys Val Lys Lys Ile Gln Lys Asp Thr Phe Lys Gly Met Asn Ala
185 190 195
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				305					310					315
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Asp	Glu	Thr	Trp	His	Pro	Asp	Leu	Gly	Gln	Pro	Phe	Gly	Val	Met
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Leu	Leu	Phe	Arg	Gly 320	Leu	Leu	Glu	Pro	Arg 325	Ser	Gly	Gly	Leu	Thr 330
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Arg	Glu	Leu	Gln	Ala 350	Asn	Val	Ser	Ala	Gln 355	Glu	Pro	Gly	Phe	Ala 360
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Leu Arg Ile Ser Gly His Ile Ala Ala	Arg Lys Ser Cys Asp Val	
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425	430	435
Ser Leu Ile Tyr Gln Val Gln Val Val	Gly Thr Ser Ser Glu Val	
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Val Ala Met Thr Leu Glu Thr Lys Pro	Gln Arg Arg Asp Gln Arg	
455	460	465
Thr Val Leu Cys His Met Ala Gly Leu	Gln Pro Gly Gly His Thr	
470	475	480
Ala Val Gly Ile Cys Pro Gly Leu Gly	Ala Arg Gly Ala His Met	
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515	520	525
Gly His Ser Ala Arg His Asp Thr Leu	Pro Val Pro Leu Ala Gly	
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Ala Leu Val Leu Pro Pro Val Lys Ser	Gln Ala Ala Gly His Ala	
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Trp Leu Ser Leu Asp Thr His Cys His	Leu His Tyr Glu Val Leu	
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Pro Glu Leu Leu Arg His Leu Ala Lys	Gly Met Ala Ser Leu Met	
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Ile Thr Thr Lys Gly Ser Pro Arg Gly	Glu Leu Arg Gly Gln Val	
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650	655	660

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Ser Ala Ala Pro Pro Val Val Pro Gly Leu Pro Ala Leu Ala Pro	680	685	690
Ala Lys Pro Gly Gly Pro Gly Arg Pro Arg Asp Pro Asn Thr Cys	695	700	705
Phe Phe Glu Gly Gln Gln Arg Pro His Gly Ala Arg Trp Ala Pro	710	715	720
Asn Tyr Asp Pro Leu Cys Ser Leu Cys Thr Cys Gln Arg Arg Thr	725	730	735
Val Ile Cys Asp Pro Val Val Cys Pro Pro Pro Ser Cys Pro His	740	745	750
Pro Val Gln Ala Pro Asp Gln Cys Cys Pro Val Cys Pro Glu Lys	755	760	765
Gln Asp Val Arg Asp Leu Pro Gly Leu Pro Arg Ser Arg Asp Pro	770	775	780
Gly Glu Gly Cys Tyr Phe Asp Gly Asp Arg Ser Trp Arg Ala Ala	785	790	795
Gly Thr Arg Trp His Pro Val Val Pro Pro Phe Gly Leu Ile Lys	800	805	810
Cys Ala Val Cys Thr Cys Lys Gly Gly Thr Gly Glu Val His Cys	815	820	825
Glu Lys Val Gln Cys Pro Arg Leu Ala Cys Ala Gln Pro Val Arg	830	835	840
Val Asn Pro Thr Asp Cys Cys Lys Gln Cys Pro Val Gly Ser Gly	845	850	855
Ala His Pro Gln Leu Gly Asp Pro Met Gln Ala Asp Gly Pro Arg	860	865	870
Gly Cys Arg Phe Ala Gly Gln Trp Phe Pro Glu Ser Gln Ser Trp	875	880	885
His Pro Ser Val Pro Pro Phe Gly Glu Met Ser Cys Ile Thr Cys	890	895	900
Arg Cys Gly Ala Gly Val Pro His Cys Glu Arg Asp Asp Cys Ser	905	910	915
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 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 11
 ggcgacagc acgcagcgca tcaccccgaa tggctc 36

<210> 12
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 12
 gtgctgccca tccgttctga gaagga 26

<210> 13

<211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 13
 gcagggtgct caaacaggac ac 22

<210> 14
 <211> 3231
 <212> DNA
 <213> Homo Sapien

<400> 14
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 tgcccgcgct ggccctgctg ctgctgctgc tcggagcggg gccccgaggc 200
 agctccctgg ccaaccgggt gccgcgcg cccttgtctg cgcgcgggccc 250
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 agccggaccc gcagcaccgc gccccgcgc gcgagcctgg ctacagctgc 350
 acctgccccg ccgggatctc cggcgccaac tgccagcttg ttgcagatcc 400
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 catggcacc cgcagcttcc agcctgttcc tgcactcag gagcctgaca 600
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caaatgactt ggagtgttca ggaaaaggaa aatgcaccac gaagccgtca 1100
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 tcagtagtga gtattttctca tagtgcagct ttatttatct ccaggatggt 3150
 tttgtggctg tatttgattg atatgtgctt cttctgattc ttgctaattt 3200
 ccaaccatat tgaataaatg tgatcaagtc a 3231

<210> 15
 <211> 737
 <212> PRT
 <213> Homo Sapien

<400> 15
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 1 5 10 15
 Ala Leu Ala Leu Leu Leu Leu Leu Gly Ala Gly Pro Arg Gly
 20 25 30
 Ser Ser Leu Ala Asn Pro Val Pro Ala Ala Pro Leu Ser Ala Pro
 35 40 45
 Gly Pro Cys Ala Ala Gln Pro Cys Arg Asn Gly Gly Val Cys Thr
 50 55 60
 Ser Arg Pro Glu Pro Asp Pro Gln His Pro Ala Pro Ala Gly Glu
 65 70 75
 Pro Gly Tyr Ser Cys Thr Cys Pro Ala Gly Ile Ser Gly Ala Asn
 80 85 90
 Cys Gln Leu Val Ala Asp Pro Cys Ala Ser Asn Pro Cys His His
 95 100 105
 Gly Asn Cys Ser Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

110	115	120
Cys Ile Cys Asn Glu Gly Tyr Glu Gly	Pro Asn Cys Glu Gln Ala	
125	130	135
Leu Pro Ser Leu Pro Ala Thr Gly Trp	Thr Glu Ser Met Ala Pro	
140	145	150
Arg Gln Leu Gln Pro Val Pro Ala Thr	Gln Glu Pro Asp Lys Ile	
155	160	165
Leu Pro Arg Ser Gln Ala Thr Val Thr	Leu Pro Thr Trp Gln Pro	
170	175	180
Lys Thr Gly Gln Lys Val Val Glu Met	Lys Trp Asp Gln Val Glu	
185	190	195
Val Ile Pro Asp Ile Ala Cys Gly Asn	Ala Ser Ser Asn Ser Ser	
200	205	210
Ala Gly Gly Arg Leu Val Ser Phe Glu	Val Pro Gln Asn Thr Ser	
215	220	225
Val Lys Ile Arg Gln Asp Ala Thr Ala	Ser Leu Ile Leu Leu Trp	
230	235	240
Lys Val Thr Ala Thr Gly Phe Gln Gln	Cys Ser Leu Ile Asp Gly	
245	250	255
Arg Ser Val Thr Pro Leu Gln Ala Ser	Gly Gly Leu Val Leu Leu	
260	265	270
Glu Glu Met Leu Ala Leu Gly Asn Asn	His Phe Ile Gly Phe Val	
275	280	285
Asn Asp Ser Val Thr Lys Ser Ile Val	Ala Leu Arg Leu Thr Leu	
290	295	300
Val Val Lys Val Ser Thr Cys Val Pro	Gly Glu Ser His Ala Asn	
305	310	315
Asp Leu Glu Cys Ser Gly Lys Gly Lys	Cys Thr Thr Lys Pro Ser	
320	325	330
Glu Ala Thr Phe Ser Cys Thr Cys Glu	Glu Gln Tyr Val Gly Thr	
335	340	345
Phe Cys Glu Glu Tyr Asp Ala Cys Gln	Arg Lys Pro Cys Gln Asn	
350	355	360
Asn Ala Ser Cys Ile Asp Ala Asn Glu	Lys Gln Asp Gly Ser Asn	
365	370	375
Phe Thr Cys Val Cys Leu Pro Gly Tyr	Thr Gly Glu Leu Cys Gln	
380	385	390
Ser Lys Ile Asp Tyr Cys Ile Leu Asp	Pro Cys Arg Asn Gly Ala	
395	400	405

Thr Cys Ile Ser	Ser Leu Ser Gly Phe	Thr Cys Gln Cys Pro Glu
410	415	420
Gly Tyr Phe Gly	Ser Ala Cys Glu Glu	Lys Val Asp Pro Cys Ala
425	430	435
Ser Ser Pro Cys	Gln Asn Asn Gly Thr	Cys Tyr Val Asp Gly Val
440	445	450
His Phe Thr Cys	Asn Cys Ser Pro Gly	Phe Thr Gly Pro Thr Cys
455	460	465
Ala Gln Leu Ile	Asp Phe Cys Ala Leu	Ser Pro Cys Ala His Gly
470	475	480
Thr Cys Arg Ser	Val Gly Thr Ser Tyr	Lys Cys Leu Cys Asp Pro
485	490	495
Gly Tyr His Gly	Leu Tyr Cys Glu Glu	Glu Tyr Asn Glu Cys Leu
500	505	510
Ser Ala Pro Cys	Leu Asn Ala Ala Thr	Cys Arg Asp Leu Val Asn
515	520	525
Gly Tyr Glu Cys	Val Cys Leu Ala Glu	Tyr Lys Gly Thr His Cys
530	535	540
Glu Leu Tyr Lys	Asp Pro Cys Ala Asn	Val Ser Cys Leu Asn Gly
545	550	555
Ala Thr Cys Asp	Ser Asp Gly Leu Asn	Gly Thr Cys Ile Cys Ala
560	565	570
Pro Gly Phe Thr	Gly Glu Glu Cys Asp	Ile Asp Ile Asn Glu Cys
575	580	585
Asp Ser Asn Pro	Cys His His Gly Gly	Ser Cys Leu Asp Gln Pro
590	595	600
Asn Gly Tyr Asn	Cys His Cys Pro His	Gly Trp Val Gly Ala Asn
605	610	615
Cys Glu Ile His	Leu Gln Trp Lys Ser	Gly His Met Ala Glu Ser
620	625	630
Leu Thr Asn Met	Pro Arg His Ser Leu	Tyr Ile Ile Ile Gly Ala
635	640	645
Leu Cys Val Ala	Phe Ile Leu Met Leu	Ile Ile Leu Ile Val Gly
650	655	660
Ile Cys Arg Ile	Ser Arg Ile Glu Tyr	Gln Gly Ser Ser Arg Pro
665	670	675
Ala Tyr Glu Glu	Phe Tyr Asn Cys Arg	Ser Ile Asp Ser Glu Phe
680	685	690
Ser Asn Ala Ile	Ala Ser Ile Arg His	Ala Arg Phe Gly Lys Lys

705

Asp Leu

<213> Artificial Sequence

<223> Synthetic Oligonucleotide Probe

tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<213> Artificial Sequence

<223> Synthetic Oligonucleotide Probe

caggaaacag ctatgaccac ctgcacacct gcaaattccat t 41

<213> Homo Sapien

ctctggaagg tcacggccac aggattccaa cagtgcctcc tcatagatgg 50

acgaaagtgt gacccccctt tcaggctttc aggggggactg gtcctcctgg 100

aggagatgct cgccttgggg aataatcact ttattggttt tgtgaatgat 150

tctgtgacta agtctattgt ggctttgcgc ttaactctgg tqgtgaagggt 200

cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcaq 250

gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttctgtacc 300

tgtgaggagc agtacgtggg tactttctgt gaaqaatacg atgcttgcca 350

gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400

aagatgggag caatttcacc tgtgtttgcc ttcttggtta tactggagag 450

ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 19
<211> 508
<212> DNA
<213> Homo Sapien

<400> 19
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aggagatgct cgccttgggg aataatcact ttattggttt tgtgaatgat 150
tctgtgacta agtctattgt ggctttgcgc ttaactctgg tgggaagggt 200
cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250
gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttctgtacc 300
tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
aagatgggag caatttcacc tgtgtttgcc ttctgggta tactggagag 450
ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500
taggggag 508

<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 20
ctctggaagg tcacggccac agg 23

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 21
ctcagttcgg ttggcaaagc tctc 24

<210> 22
<211> 69
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

cagtgtctccc tcatagatgg acgaaaagtgt gacccccctt tcaggcgaga 50

gctttgccaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

gctgagtctg ctgctcctgc tgctgctgct ccagcctgta acctgtgcct 50

acaccacgcc agggcccccc agagccctca ccacgctggg cggccccaga 100

gcccacacca tgccggggcac ctacgctccc tcgaccacac tcagtagtcc 150

cagcaccacag ggccctgcaag agcaggcaag ggccctgatg cgggacttcc 200

cgctcgtgga cggccacaac gacctgcccc tggctcctaag gcagggttac 250

cagaaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300

cagcctggac aggccttagag atggcctcgt gggcgcccag ttctggtcag 350

cctatgtgcc atgccagacc caggaccggg atgcctcgcg cctcacctg 400

gagcagattg acctcatacg ccgcatgtgt gcctcctatt ctgagctgga 450

gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500

tcacgggtgt agaggggtggc cactcgctgg acaatagcct ctccatctta 550

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 aataaatggt ttggacatag 1520

<210> 24

<211> 433

<212> PRT

<213> Homo Sapien

<400> 24

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Thr	Gln	Gly	Leu	Gln	Glu	Gln	Ala	Arg	Ala	Leu	Met	Arg	Asp	Phe	
			20						25					30	
Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln	
			35						40					45	
Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser	
			50						55					60	
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly	
			65						70					75	
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg	
			80						85					90	
Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg	
			95						100					105	
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys	
			110						115					120	
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu	
			125						130					135	
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe	
			140						145					150	
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn	
			155						160					165	
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr	
			170						175					180	

<400> 25
agttctggtc agcctatgtg cc 22

<210> 26
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 26
cgtgatggtg tctttgtcca tggg 24

<210> 27
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 27
ctccaccaat cccgatgaac ttgg 24

<210> 28
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 28
gagcagattg acctcatacg ccgcattgtg gccctctatt ctgagctgga 50

<210> 29
<211> 1416
<212> DNA
<213> Homo Sapien

<400> 29
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gatccgcggc cggaattct aaaccaacat gccgggcacc tacgtccct 100
cgaccacact cagtagtccc agcaccagg gcctgcaaga gcaggcacgg 150
gccctgatgc gggacttccc gctcgtggac ggccacaacg acctgcccct 200
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 cagtctcaga gtctctcccc caccctgaca aaactcacac atgccaccg 1350
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<210> 30
 <211> 446
 <212> PRT
 <213> Homo Sapien

<400> 30
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 Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe
 20 25 30
 Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln
 35 40 45
 Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser

004439C 03401

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Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly	65		70		75
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg	80		85		90
Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg	95		100		105
Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys	110		115		120
Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu	125		130		135
Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe	140		145		150
Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn	155		160		165
Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr	170		175		180
Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala	185		190		195
Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser	200		205		210
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val	215		220		225
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg	230		235		240
Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly	245		250		255
Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro	260		265		270
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys	275		280		285
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp	290		295		300
Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr	305		310		315
Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu	320		325		330
Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg	335		340		345

Gln Val Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu	350	355	360
Glu Asp Lys Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser	365	370	375
Asp Leu Ser Arg Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln	380	385	390
Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala	395	400	405
Lys Trp Ser Val Ser Glu Ser Ser Pro His Pro Asp Lys Thr His	410	415	420
Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser	425	430	435
Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr	440	445	

<210> 31
 <211> 1790
 <212> DNA
 <213> Homo Sapien

<400> 31
 cgcccagcga cgtgcgggcg gcttgggccc cgccctccc cgcccggcct 50
 gcgtcccgcg ccttgcgcca ccgcgcgca gccgcagccc gccgcgcgcc 100
 ccgggcagcg ccggccccat gcccgcgggc cgccgggggc ccgccgcca 150
 atccgcgcgg cgccgcgcgc cgttgctgcc cctgctgctg ctgctctgcg 200
 tcttcggggc gccgcgagcc ggatcaggag ccacacagc tgtgatcagt 250
 ccccaggatc ccacgtttct catcggtccc tccctgctgg ccacctgctc 300
 agtgcacgga gacccaccag gagccaccgc cgaggggcctc tactggacct 350
 tcaacgggcg ccgcctgccc cctgagctct ccggtgtact caacgcctcc 400
 accttggtc tggccctggc caacctcaat gggtcaggc agcggtcggg 450
 ggacaacctc gtgtgccacg ccggtgacgg cagcatcctg gctggctcct 500
 gctctatgt tggcctgccc ccagagaaac ccgtcaacat cagctgctgg 550
 tccaagaaca tgaaggactt gacctgcgc tggacgccag gggcccacgg 600
 ggagaccttc ctccacacca actactccct caagtacaag cttaggtggt 650
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 tgccacatcc ccaaggacct ggtctctttt acgcctatg agatctgggt 750
 ggaggccacc aaccgctgg gctctgccc ctccgatgta ctccgctgg 800

TC30-9644650

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 gccggtgcgg cgcgagctca agcagttcct gggctggctc aagaagcacg 1250
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 gggcagacgg ggcacggcga gaggtcctgc cagataagct gtaggggctc 1400
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 tgagctatatt aggtgctgtg attgtgaaaa aaaaaaaaaa aaaaaaaaaa 1750
 aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaaaa 1790

<210> 32
 <211> 422
 <212> PRT
 <213> Homo Sapien

<400> 32
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 Pro Pro Pro Leu Leu Pro Leu Leu Leu Leu Leu Cys Val Leu Gly
 20 25 30
 Ala Pro Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro
 35 40 45
 Gln Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys
 50 55 60

350	355	360
Gly Pro Val Arg Arg Glu Leu Lys Gln Phe Leu Gly Trp Leu Lys		
365	370	375
Lys His Ala Tyr Cys Ser Asn Leu Ser Phe Arg Leu Tyr Asp Gln		
380	385	390
Trp Arg Ala Trp Met Gln Lys Ser His Lys Thr Arg Asn Gln Asp		
395	400	405
Glu Gly Ile Leu Pro Ser Gly Arg Arg Gly Thr Ala Arg Gly Pro		
410	415	420
Ala Arg		

<210> 33
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 33
 cccgcccgcac gtgcacgtga gcc 23

<210> 34
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 34
 tgagccagcc caggaactgc ttg 23

<210> 35
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 35
 caagtgcgct gcaaccctt tggcatctat ggctccaaga aagccgggat 50

<210> 36
 <211> 1771
 <212> DNA
 <213> Homo Sapien

<400> 36
 cccacgcgtc cgctgggtgtt agatcgagca accctctaaa agcagtttag 50

agtggtaaaa aaaaaaaaaa acacacccaaa cgctcgcagc cacaaaagg 100
 atgaaatttc ttctggacat cctcctgctt ctcccgttac tgatcgtctg 150
 ctccctagag tcttcctgga agctttttat tcttaagagg agaaaatcag 200
 tcacoggoga aatcgtgctg attacaggag ctgggcatgg aattgggaga 250
 ctgactgect atgaatttgc taaacttaaa agcaagctgg ttctctggga 300
 tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350
 gtgccaaggt tcataccttt gtggtagact gcagcaaccg agaagatatt 400
 tacagctctg caaagaaggt gaaggcagaa attggagatg ttagtatttt 450
 agtaaataat gctggtgtag tctatacatc agatttgctt gctacacaag 500
 atcctcagat tgaaaagact tttgaagtta atgtacttgc acatttctgg 550
 actacaaagg catttcttcc tgcaatgacg aagaataacc atggccatat 600
 tgtcactgtg gcttcggcag ctggacatgt ctcggtcccc ttcttactgg 650
 cttactgttc aagcaagttt gctgctgttg gatttcataa aactttgaca 700
 gatgaactgg ctgccttaca aataactgga gtcaaaacaa catgtctgtg 750
 tctaatctc gtaaacactg gcttcatcaa aaatccaagt acaagtttgg 800
 gacccactct ggaacctgag gaagtggtaa acaggctgat gcatgggatt 850
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 aacattggaa aggatccttc ctgagcgttt cctggcagtt ttaaaacgaa 950
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 taagcaccta gttttctgaa aactgattta ccaggtttag gttgatgtca 1050
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 ccccatctct tcaatatcat ttttgaggct ttggcagctt tcatttacta 1150
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 tttattaaaa taatttccaa gattatttgt ggctcacctg aaggctttgc 1300
 aaaatttgta ccataaccgt ttatttaaca tatattttta tttttgattg 1350
 cacttaaatt ttgtataatt tgtgtttctt tttctgttct acataaaatc 1400
 agaaacttca agctctctaa ataaaatgaa ggactatata tagtggtatt 1450
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gccactctgt ttctgagag atacctcaca ttccaatgcc aaacatttct 1550
gcacagggaa gctagaggtg gatacacgtg ttgcaagtat aaaagcatca 1600
ctgggattta aggagaattg agagaatgta cccacaaatg gcagcaataa 1650
taaattggatc acacttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1750
aaaaaaaaaa aaaaaaaaaa a 1771

<210> 37
<211> 300
<212> PRT
<213> Homo Sapien

<400> 37
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Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg
20 25 30
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
35 40 45
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
140 145 150
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
170 175 180
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
185 190 195
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

200	205	210
Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly Phe		
215	220	225
Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu		
230	235	240
Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys		
245	250	255
Met Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu		
260	265	270
Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile		
275	280	285
Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln		
290	295	300

<210> 38

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 38

ggtgaaggca gaaattggag atg 23

<210> 39

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 39

atcccatgca tcagcctgtt tacc 24

<210> 40

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 40

gctgggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 41

<211> 1377

<212> DNA

<213> Homo Sapien

<400> 41

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gaaccaggac tgggggtgacg gcagggcagg gggcgctcgg ccggggagaa 100
gcgcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150
ccgaaggagg ccatcgggga gccgggaggg gggactgcga gaggaccccg 200
gcgctcgggc tcccgggtgcc agcgctatga ggccactcct cgtcctgctg 250
ctcctggggc tggcgggcgg ctcgccccca ctggacgaca acaagatccc 300
cagcctctgc ccggggcacc ccggccttcc aggcacgccg ggccaccatg 350
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acctcgaggg gaccccgggc cgcgaggaga ggccgggacc gcggggccca 500
ccgggcctgc cggggagtgc tccgtgcctc cgcgatccgc cttcagcgcc 550
aagcgctccg agagccgggt gcctccgccg tctgacgcac ccttgccctt 600
cgaccgcgtg ctgggtgaacg agcagggaca ttacgacgcc gtcaccggca 650
agttcacctg ccagggtgct ggggtctact acttcgccgt ccatgccacc 700
gtctaccggg ccagcctgca gtttgatctg gtgaagaatg gcgaatccat 750
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cggggggggc catggtgagg ctggagcctg aggaccaagt gtgggtgcag 850
gtgggtgtgg gtgactacat tggcatctat gccagcatca agacagacag 900
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ttgcttagtg ccactgcaa agtgagctca tgctctcact cctagaagga 1000
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gggcggggcc ttttctcaga gatcactcaa taaacctaag aaccctcata 1350
aaaaaaaaa aaaaaaaaaa aaaaaaa 1377

<210> 42

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 42

Met	Arg	Pro	Leu	Leu	Val	Leu	Leu	Leu	Leu	Gly	Leu	Ala	Ala	Gly	1	5	10	15
Ser	Pro	Pro	Leu	Asp	Asp	Asn	Lys	Ile	Pro	Ser	Leu	Cys	Pro	Gly	20	25	30	
His	Pro	Gly	Leu	Pro	Gly	Thr	Pro	Gly	His	His	Gly	Ser	Gln	Gly	35	40	45	
Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Ala	Pro	Gly	50	55	60	
Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly	65	70	75	
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly	80	85	90	
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala	95	100	105	
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp	110	115	120	
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His	125	130	135	
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val	140	145	150	
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln	155	160	165	
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln	170	175	180	
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala	185	190	195	
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly	200	205	210	
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser	215	220	225	
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro	230	235	240	

Val Phe Ala

<210> 43
 <211> 24

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 43
tacaggccca gtcaggacca gggg 24

<210> 44
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 44
agccagcctc gctctcgg 18

<210> 45
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 45
gtctgcgatc aggtctgg 18

<210> 46
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 46
gaaagaggca atggattcgc 20

<210> 47
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 47
gacttacact tgccagcaca gcac 24

<210> 48
<211> 45
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

ggagcaccac caactggagg gtccggagta gcgagcgccc cgaag 45

<210> 49

<211> 1876

<212> DNA

<213> Homo Sapien

<400> 49

ctcttttgtc caccagccca gcctgactcc tggagattgt gaatagctcc 50
atccagcctg agaaacaagc cgggtggctg agccaggctg tgcacggagc 100
acctgacggg cccaacagac ccatgctgca tccagagacc tccctggcc 150
gggggcatct cctggctgtg ctctggccc tcttggcac cacctgggca 200
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tgcagctgct gcccgcgggc ttggcgctct ttgttgaagt ggtcagccta 500
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gtccccagga atccttgctg catgagctgc cagaaccatg gacgtctcaa 850
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 ccacctgtct ggaacaaggg ccagggttaag accacatgcc tcatgtccaa 1600
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 gaggccagtg agggccaggg agtgagtgtt agaagaagct ggggcccttc 1700
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 acaccgccag tgggtccaaa aggtctctct ctccacctg gccagaccc 1800
 tgtggggcag cggagcttcc ctgtggcatg aacccacgg ggtattaaat 1850
 tatgaatcag ctgaaaaaaaa aaaaaa 1876

<210> 50
 <211> 455
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala
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 Val Leu Leu Ala Leu Leu Gly Thr Thr Trp Ala Glu Val Trp Pro
 20 25 30
 Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg
 35 40 45
 Lys Glu Ser Phe Leu Leu Leu Ser Leu His Asn Arg Leu Arg Ser
 50 55 60
 Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser
 65 70 75
 Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly
 80 85 90
 Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln
 95 100 105
 Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

110										115					120				
Val	Glu	Val	Val	Ser	Leu	Trp	Phe	Ala		Glu	Gly	Gln	Arg	Tyr	Ser				
				125										130					135
His	Ala	Ala	Gly	Glu	Cys	Ala	Arg	Asn	Ala	Thr	Cys	Thr	His	Tyr					
				140										145					150
Thr	Gln	Leu	Val	Trp	Ala	Thr	Ser	Ser	Gln	Leu	Gly	Cys	Gly	Arg					
				155										160					165
His	Leu	Cys	Ser	Ala	Gly	Gln	Thr	Ala	Ile	Glu	Ala	Phe	Val	Cys					
				170										175					180
Ala	Tyr	Ser	Pro	Gly	Gly	Asn	Trp	Glu	Val	Asn	Gly	Lys	Thr	Ile					
				185										190					195
Ile	Pro	Tyr	Lys	Lys	Gly	Ala	Trp	Cys	Ser	Leu	Cys	Thr	Ala	Ser					
				200										205					210
Val	Ser	Gly	Cys	Phe	Lys	Ala	Trp	Asp	His	Ala	Gly	Gly	Leu	Cys					
				215										220					225
Glu	Val	Pro	Arg	Asn	Pro	Cys	Arg	Met	Ser	Cys	Gln	Asn	His	Gly					
				230										235					240
Arg	Leu	Asn	Ile	Ser	Thr	Cys	His	Cys	His	Cys	Pro	Pro	Gly	Tyr					
				245										250					255
Thr	Gly	Arg	Tyr	Cys	Gln	Val	Arg	Cys	Ser	Leu	Gln	Cys	Val	His					
				260										265					270
Gly	Arg	Phe	Arg	Glu	Glu	Glu	Cys	Ser	Cys	Val	Cys	Asp	Ile	Gly					
				275										280					285
Tyr	Gly	Gly	Ala	Gln	Cys	Ala	Thr	Lys	Val	His	Phe	Pro	Phe	His					
				290										295					300
Thr	Cys	Asp	Leu	Arg	Ile	Asp	Gly	Asp	Cys	Phe	Met	Val	Ser	Ser					
				305										310					315
Glu	Ala	Asp	Thr	Tyr	Tyr	Arg	Ala	Arg	Met	Lys	Cys	Gln	Arg	Lys					
				320										325					330
Gly	Gly	Val	Leu	Ala	Gln	Ile	Lys	Ser	Gln	Lys	Val	Gln	Asp	Ile					
				335										340					345
Leu	Ala	Phe	Tyr	Leu	Gly	Arg	Leu	Glu	Thr	Thr	Asn	Glu	Val	Thr					
				350										355					360
Asp	Ser	Asp	Phe	Glu	Thr	Arg	Asn	Phe	Trp	Ile	Gly	Leu	Thr	Tyr					
				365										370					375
Lys	Thr	Ala	Lys	Asp	Ser	Phe	Arg	Trp	Ala	Thr	Gly	Glu	His	Gln					
				380										385					390
Ala	Phe	Thr	Ser	Phe	Ala	Phe	Gly	Gln	Pro	Asp	Asn	His	Gly	Leu					
				395										400					405

Val Trp Leu Ser Ala Ala Met Gly Phe Gly Asn Cys Val Glu Leu
 410 415 420

Gln Ala Ser Ala Ala Phe Asn Trp Asn Asp Gln Arg Cys Lys Thr
 425 430 435

Arg Asn Arg Tyr Ile Cys Gln Phe Ala Gln Glu His Ile Ser Arg
 440 445 450

Trp Gly Pro Gly Ser
 455

<210> 51

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 51

aggaacttct ggatcgggct cacc 24

<210> 52

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 52

gggtctgggc caggtggaag agag 24

<210> 53

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 53

gccaaggact ccttcgctg ggccacaggg gagcaccagg ccttc 45

<210> 54

<211> 2331

<212> DNA

<213> Homo Sapien

<400> 54

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gctgtccctg tgtgtggggc cgcaggaaga ggcgagagc tggggccact 150

cttcggagca ggatggactc aggggtccga ggcaagtcag actgttcgag 200

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<211> 694
<212> PRT
<213> Homo Sapien

<400> 55
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Asp Gly Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu
35 40 45
Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile
50 55 60
Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn
65 70 75
Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro
80 85 90
Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys
95 100 105
Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp
110 115 120

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Lys	Gly	Thr	Glu	Ile 140	Phe	Arg	Ala	Ser	Ala 145	Val	Ile	Pro	Ser	Lys 150
Asp	Lys	Ala	Ala	Phe 155	Phe	Leu	Ser	Tyr	Glu 160	Glu	Leu	Leu	Gln	Arg 165
Arg	Leu	Gly	Lys	Tyr 170	Glu	His	Ser	Ile	Ser 175	Val	Arg	Pro	Gln	Glu 180
Leu	Ser	Gly	Arg	Leu 185	Ser	Val	Asp	Val	Asn 190	Ile	Leu	Glu	Ser	Ala 195
Gly	Ile	Ala	Ser	Leu 200	Glu	Val	Leu	Pro	Leu 205	His	Asn	Ser	Arg	Gln 210
Arg	Gly	Ser	Gly	Arg 215	Gly	Glu	Asp	Asp	Ser 220	Gly	Pro	Pro	Pro	Ser 225
Thr	Val	Ile	Asn	Gln 230	Asn	Glu	Thr	Phe	Ala 235	Asn	Ile	Ile	Phe	Lys 240
Pro	Thr	Val	Val	Gln 245	Gln	Ala	Arg	Ile	Ala 250	Gln	Asn	Gly	Ile	Leu 255
Gly	Asp	Phe	Ile	Ile 260	Arg	Tyr	Asp	Val	Asn 265	Arg	Glu	Gln	Ser	Ile 270
Gly	Asp	Ile	Gln	Val 275	Leu	Asn	Gly	Tyr	Phe 280	Val	His	Tyr	Phe	Ala 285
Pro	Lys	Asp	Leu	Pro 290	Pro	Leu	Pro	Lys	Asn 295	Val	Val	Phe	Val	Leu 300
Asp	Ser	Ser	Ala	Ser 305	Met	Val	Gly	Thr	Lys 310	Leu	Arg	Gln	Thr	Lys 315
Asp	Ala	Leu	Phe	Thr 320	Ile	Leu	His	Asp	Leu 325	Arg	Pro	Gln	Asp	Arg 330
Phe	Ser	Ile	Ile	Gly 335	Phe	Ser	Asn	Arg	Ile 340	Lys	Val	Trp	Lys	Asp 345
His	Leu	Ile	Ser	Val 350	Thr	Pro	Asp	Ser	Ile 355	Arg	Asp	Gly	Lys	Val 360
Tyr	Ile	His	His	Met 365	Ser	Pro	Thr	Gly	Gly 370	Thr	Asp	Ile	Asn	Gly 375
Ala	Leu	Gln	Arg	Ala 380	Ile	Arg	Leu	Leu	Asn 385	Lys	Tyr	Val	Ala	His 390
Ser	Gly	Ile	Gly	Asp 395	Arg	Ser	Val	Ser	Leu 400	Ile	Val	Phe	Leu	Thr 405
Asp	Gly	Lys	Pro	Thr	Val	Gly	Glu	Thr	His	Thr	Leu	Lys	Ile	Leu

Asn Asn Thr Arg	Glu Ala Ala Arg Gly	Gln Val Cys Ile Phe Thr
425	430	435
Ile Gly Ile Gly	Asn Asp Val Asp Phe Arg	Leu Leu Glu Lys Leu
440	445	450
Ser Leu Glu Asn	Cys Gly Leu Thr Arg Arg	Val His Glu Glu Glu
455	460	465
Asp Ala Gly Ser	Gln Leu Ile Gly Phe Tyr Asp	Glu Ile Arg Thr
470	475	480
Pro Leu Leu Ser	Asp Ile Arg Ile Asp Tyr Pro	Pro Ser Ser Val
485	490	495
Val Gln Ala Thr	Lys Thr Leu Phe Pro Asn Tyr	Phe Asn Gly Ser
500	505	510
Glu Ile Ile Ile	Ala Gly Lys Leu Val Asp Arg	Lys Leu Asp His
515	520	525
Leu His Val Glu	Val Thr Ala Ser Asn Ser Lys	Lys Phe Ile Ile
530	535	540
Leu Lys Thr Asp	Val Pro Val Arg Pro Gln Lys	Ala Gly Lys Asp
545	550	555
Val Thr Gly Ser	Pro Arg Pro Gly Gly Asp Gly	Glu Gly Asp Thr
560	565	570
Asn His Ile Glu	Arg Leu Trp Ser Tyr Leu Thr	Thr Lys Glu Leu
575	580	585
Leu Ser Ser Trp	Leu Gln Ser Asp Asp Glu Pro	Glu Lys Glu Arg
590	595	600
Leu Arg Gln Arg	Ala Gln Ala Leu Ala Val Ser	Tyr Arg Phe Leu
605	610	615
Thr Pro Phe Thr	Ser Met Lys Leu Arg Gly Pro	Val Pro Arg Met
620	625	630
Asp Gly Leu Glu	Glu Ala His Gly Met Ser Ala	Ala Met Gly Pro
635	640	645
Glu Pro Val Val	Gln Ser Val Arg Gly Ala Gly	Thr Gln Pro Gly
650	655	660
Pro Leu Leu Lys	Lys Pro Asn Ser Val Lys Lys	Lys Gln Asn Lys
665	670	675
Thr Lys Lys Arg	His Gly Arg Asp Gly Val Phe	Pro Leu His His
680	685	690
Leu Gly Ile Arg		

<210> 56
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 56
 gtgggaacca aactccggca gacc 24

<210> 57
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 57
 cacatcgagc gtctctgg 18

<210> 58
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 58
 agccgtctct tctccggttc atcg 24

<210> 59
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 59
 tggaaggacc acttgatata agtcactcca gacagcatca gggatggg 48

<210> 60
 <211> 1413
 <212> DNA
 <213> Homo Sapien

<400> 60
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 ccagtgtgag gcggcagcgg cggcgggcgg gcctcccggg ctccggcttc 100
 tgctgttgct cttctccgcc gcggcactga tccccacagg tgatgggcag 150
 aatctgttta cgaaagacgt gacagtgate gagggagagg ttgcgaccat 200

cagttgccaa gtcaataaga gtgacgactc tgtgattcag ctactgaatc 250
ccaacaggca gaccatztat tttagggact tcaggccttt gaaggacagc 300
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aatctgatga tcgatatcca gaaagacact gcggtggaag gtgaggagat 500
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<210> 61

<211> 440

<212> PRT

<213> Homo Sapien

<400> 61

Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala
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Ala	Ala	Ala	Ala	Ala 20	Pro	Pro	Gly	Leu	Arg 25	Leu	Leu	Leu	Leu	Leu 30
Phe	Ser	Ala	Ala	Ala 35	Leu	Ile	Pro	Thr	Gly 40	Asp	Gly	Gln	Asn	Leu 45
Phe	Thr	Lys	Asp	Val 50	Thr	Val	Ile	Glu	Gly 55	Glu	Val	Ala	Thr	Ile 60
Ser	Cys	Gln	Val	Asn 65	Lys	Ser	Asp	Asp	Ser 70	Val	Ile	Gln	Leu	Leu 75
Asn	Pro	Asn	Arg	Gln 80	Thr	Ile	Tyr	Phe	Arg 85	Asp	Phe	Arg	Pro	Leu 90
Lys	Asp	Ser	Arg	Phe 95	Gln	Leu	Leu	Asn	Phe 100	Ser	Ser	Ser	Glu	Leu 105
Lys	Val	Ser	Leu	Thr 110	Asn	Val	Ser	Ile	Ser 115	Asp	Glu	Gly	Arg	Tyr 120
Phe	Cys	Gln	Leu	Tyr 125	Thr	Asp	Pro	Pro	Gln 130	Glu	Ser	Tyr	Thr	Thr 135
Ile	Thr	Val	Leu	Val 140	Pro	Pro	Arg	Asn	Leu 145	Met	Ile	Asp	Ile	Gln 150
Lys	Asp	Thr	Ala	Val 155	Glu	Gly	Glu	Glu	Ile 160	Glu	Val	Asn	Cys	Thr 165
Ala	Met	Ala	Ser	Lys 170	Pro	Ala	Thr	Thr	Ile 175	Arg	Trp	Phe	Lys	Gly 180
Asn	Thr	Glu	Leu	Lys 185	Gly	Lys	Ser	Glu	Val 190	Glu	Glu	Trp	Ser	Asp 195
Met	Tyr	Thr	Val	Thr 200	Ser	Gln	Leu	Met	Leu 205	Lys	Val	His	Lys	Glu 210
Asp	Asp	Gly	Val	Pro 215	Val	Ile	Cys	Gln	Val 220	Glu	His	Pro	Ala	Val 225
Thr	Gly	Asn	Leu	Gln 230	Thr	Gln	Arg	Tyr	Leu 235	Glu	Val	Gln	Tyr	Lys 240
Pro	Gln	Val	His	Ile 245	Gln	Met	Thr	Tyr	Pro 250	Leu	Gln	Gly	Leu	Thr 255
Arg	Glu	Gly	Asp	Ala 260	Leu	Glu	Leu	Thr	Cys 265	Glu	Ala	Ile	Gly	Lys 270
Pro	Gln	Pro	Val	Met 275	Val	Thr	Trp	Val	Arg 280	Val	Asp	Asp	Glu	Met 285
Pro	Gln	His	Ala	Val 290	Leu	Ser	Gly	Pro	Asn 295	Leu	Phe	Ile	Asn	Asn 300
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[illegible]

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<210> 62
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 62
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<210> 63
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 63
  gtacactgtg accagtcagc 20

<210> 64
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

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<400> 64
atcatcacag attcccgagc 20

<210> 65
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 65
ttcaatctcc tcacottoca ccgc 24

<210> 66
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 66
atagctgtgt ctgcgtctgc tgcg 24

<210> 67
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 67
cgcggcactg atccccacag gtgatgggca gaatctgttt acgaaagacg 50

<210> 68
<211> 2555
<212> DNA
<213> Homo Sapien

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 aaaaa 2555

<210> 69
 <211> 598
 <212> PRT
 <213> Homo Sapien

<400> 69
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 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45
 Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
 50 55 60
 Glu Asn Gly Ile Thr Met Leu Asp Ala Ser Ser Phe Ala Gly Leu
 65 70 75
 Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
 80 85 90
 Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
 95 100 105
 Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu

110	115	120
Ala Leu Arg Leu	Ala Gly Leu Gly Leu	Gln Gln Leu Asp Glu Gly
125	130	135
Leu Phe Ser Arg	Leu Arg Asn Leu His	Asp Leu Asp Val Ser Asp
140	145	150
Asn Gln Leu Glu	Arg Val Pro Pro Val	Ile Arg Gly Leu Arg Gly
155	160	165
Leu Thr Arg Leu	Arg Leu Ala Gly Asn	Thr Arg Ile Ala Gln Leu
170	175	180
Arg Pro Glu Asp	Leu Ala Gly Leu Ala	Ala Leu Gln Glu Leu Asp
185	190	195
Val Ser Asn Leu	Ser Leu Gln Ala Leu	Pro Gly Asp Leu Ser Gly
200	205	210
Leu Phe Pro Arg	Leu Arg Leu Leu Ala	Ala Ala Arg Asn Pro Phe
215	220	225
Asn Cys Val Cys	Pro Leu Ser Trp Phe	Gly Pro Trp Val Arg Glu
230	235	240
Ser His Val Thr	Leu Ala Ser Pro Glu	Glu Thr Arg Cys His Phe
245	250	255
Pro Pro Lys Asn	Ala Gly Arg Leu Leu	Leu Glu Leu Asp Tyr Ala
260	265	270
Asp Phe Gly Cys	Pro Ala Thr Thr Thr	Thr Ala Thr Val Pro Thr
275	280	285
Thr Arg Pro Val	Val Arg Glu Pro Thr	Ala Leu Ser Ser Ser Leu
290	295	300
Ala Pro Thr Trp	Leu Ser Pro Thr Ala	Pro Ala Thr Glu Ala Pro
305	310	315
Ser Pro Pro Ser	Thr Ala Pro Pro Thr	Val Gly Pro Val Pro Gln
320	325	330
Pro Gln Asp Cys	Pro Pro Ser Thr Cys	Leu Asn Gly Gly Thr Cys
335	340	345
His Leu Gly Thr	Arg His His Leu Ala	Cys Leu Cys Pro Glu Gly
350	355	360
Phe Thr Gly Leu	Tyr Cys Glu Ser Gln	Met Gly Gln Gly Thr Arg
365	370	375
Pro Ser Pro Thr	Pro Val Thr Pro Arg	Pro Pro Arg Ser Leu Thr
380	385	390
Leu Gly Ile Glu	Pro Val Ser Pro Thr	Ser Leu Arg Val Gly Leu
395	400	405

Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg	410	415	420
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr	425	430	435
Leu	Arg	Leu	Pro	Ala	Ser	Leu	Ala	Glu	Tyr	Thr	Val	Thr	Gln	Leu	440	445	450
Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro	455	460	465
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr	470	475	480
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg	485	490	495
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val	500	505	510
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg	515	520	525
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val	530	535	540
Gly	Pro	Gly	Ala	Gly	Pro	Leu	Glu	Leu	Glu	Gly	Val	Lys	Val	Pro	545	550	555
Leu	Glu	Pro	Gly	Pro	Lys	Ala	Thr	Glu	Gly	Gly	Gly	Glu	Ala	Leu	560	565	570
Pro	Ser	Gly	Ser	Glu	Cys	Glu	Val	Pro	Leu	Met	Gly	Phe	Pro	Gly	575	580	585
Pro	Gly	Leu	Gln	Ser	Pro	Leu	His	Ala	Lys	Pro	Tyr	Ile			590	595	

<210> 70

<212> DNA

<220>

<400> 70

<210> 71

<212> DNA

<220>

<400> 71
cggttcttggg gacgttaggg ctcg 24

<210> 72
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 72
ctgcccaccg tccacctgcc tcaat 25

<210> 73
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 73
aggactgcc accgtccacc tgcctcaatg ggggcacatg ccacc 45

<210> 74
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 74
acgcaaagcc ctacatctaa gccagagaga gacagggcag ctggg 45

<210> 75
<211> 1077
<212> DNA
<213> Homo Sapien

<400> 75
ggcactagga caaccttctt cctttctgca ccaactgccc tacccttacc 50
cgccccgcca cctccttgct accccactct tgaaaccaca gctgttgga 100
gggtccccag ctcatgccag cctcatctcc tttcttgcta gccccaaaag 150
ggcctccagg caacatgggg ggcccagtc gagagccggc actctcagtt 200
gccctctggt tgagttgggg ggcagctctg ggggccgtgg cttgtgccat 250
ggctctgctg acccaacaaa cagagctgca gagcctcagg agagaggtga 300
gccggctgca ggggacagga ggccccccc agaatgggga agggatatccc 350
tggcagagtc tcccggagca gagttccgat gccctggaag cctgggagaa 400

tggggagaga tcccgga aaa ggagagcagt gctcacccaa aaacagaaga 450
 agcagcactc tgtcctgcac ctggttccca ttaacgccac ctccaaggat 500
 gactccgatg tgacagaggt gatgtggcaa ccagctctta ggcgtgggag 550
 aggcctacag gcccaaggat atggtgtccg aatccaggat gctggagttt 600
 atctgctgta tagccagggt ctgtttcaag acgtgacttt caccatgggt 650
 cagggtggtgt ctcgagaagg ccaaggaagg caggagactc tattccgatg 700
 tataagaagt atgccctccc acccggaccg ggccataaac agctgctata 750
 ggcaggtgt cttccattta caccaagggg atattctgag tgcataatt 800
 ccccgggcaa gggcgaaact taacctctt ccacatggaa ccttcctggg 850
 gtttgtgaaa ctgtgattgt gttataaaaa gtggctccca gcttggaaga 900
 ccaggggtggg tacatactgg agacagccaa gagctgagta tataaaggag 950
 agggaaatgtg caggaacaga ggcattcttc tgggtttggc tccccgttcc 1000
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 cttgcttctg ttcccatgg agtccg 1077

<210> 76
 <211> 250
 <212> PRT
 <213> Homo Sapien

<400> 76
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 Gly Asn Met Gly Gly Pro Val Arg Glu Pro Ala Leu Ser Val Ala
 20 25 30
 Leu Trp Leu Ser Trp Gly Ala Ala Leu Gly Ala Val Ala Cys Ala
 35 40 45
 Met Ala Leu Leu Thr Gln Gln Thr Glu Leu Gln Ser Leu Arg Arg
 50 55 60
 Glu Val Ser Arg Leu Gln Gly Thr Gly Gly Pro Ser Gln Asn Gly
 65 70 75
 Glu Gly Tyr Pro Trp Gln Ser Leu Pro Glu Gln Ser Ser Asp Ala
 80 85 90
 Leu Glu Ala Trp Glu Asn Gly Glu Arg Ser Arg Lys Arg Arg Ala
 95 100 105
 Val Leu Thr Gln Lys Gln Lys Lys Gln His Ser Val Leu His Leu
 110 115 120

Table 1. Demographic characteristics of the study population	
Age (years)	65.0 ± 1.5
Gender	
Male	50 (50.0%)
Female	50 (50.0%)
Education (years)	12.0 ± 1.0
Marital status	
Married	40 (80.0%)
Single	10 (20.0%)
Occupation	
Retired	40 (80.0%)
Unemployed	10 (20.0%)
Income (USD/month)	1,200.0 ± 200.0
Health status	
Good	40 (80.0%)
Poor	10 (20.0%)
Comorbidities	
Hypertension	30 (60.0%)
Diabetes	20 (40.0%)
Cholesterol	15 (30.0%)
Smoking status	
Smoker	10 (20.0%)
Non-smoker	40 (80.0%)
Alcohol consumption	
Regular	5 (10.0%)
Occasional	15 (30.0%)
Never	30 (60.0%)

<211> 2849

<212> DNA

<213> Homo Sapien

cactttctcc	ctctcttccct	ttacttttcga	gaaaccgcgc	ttccgcttct	50
ggtcgcagag	acctcggaga	ccgcgccggg	gagacggagg	tgctgtgggt	100
gggggggacc	tgtggctgct	cgtaccgccc	cccaccctcc	tctttctgcac	150
tgccgtcctc	cggaagacct	tttccctgc	tctgtttcct	tcaccgagtc	200
tgtgcatcgc	cccggaacctg	gccgggagga	ggcttggccg	gcgggagatg	250
ctctaggggc	ggcgcgggag	gagcggcccg	cgggacggag	ggcccggcag	300
gaagatgggc	tcccgtggac	agggaactctt	gctggcgta	tgccctgctcc	350
ttgcctttgc	ctctggcctg	gtcctgagtc	gtgtgcccc	tgtccagggg	400
gaacagcagg	agtgggaggg	gactgaggag	ctgccgtcgc	ctccggacca	450
tgccgagagg	gctgaagaac	aacatgaaaa	atacaggccc	agtcaggacc	500
aggggctccc	tgcttcccgc	tgcttgcgct	gctgtgaccc	cggtaacctcc	550
atgtaccocg	cgaccgccgt	gccccagatc	aacatcacta	tcttgaaagg	600
ggagaagggg	gaccgcggag	atcgaggcct	ccaagggaaa	tatggcaaaa	650

caggctcagc agggggccagg ggccacactg gacccaaagg gcagaagggc 700
 tccatggggg cccctgggga gcggtgcaag agccactacg ccgccttttc 750
 ggtggggcgg aagaagccca tgcacagcaa ccactactac cagacggtga 800
 tcttcgacac ggagttcgtg aacctctacg accacttcaa catgttcacc 850
 ggcaagttct actgctacgt gcccggcctc tactttctca gcctcaacgt 900
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<210> 78
 <211> 281
 <212> PRT
 <213> Homo Sapien

<400> 78
 Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu
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 Leu Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val
 20 25 30
 Gln Gly Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser
 35 40 45
 Pro Pro Asp His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr
 50 55 60
 Arg Pro Ser Gln Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg
 65 70 75
 Cys Cys Asp Pro Gly Thr Ser Met Tyr Pro Ala Thr Ala Val Pro
 80 85 90
 Gln Ile Asn Ile Thr Ile Leu Lys Gly Glu Lys Gly Asp Arg Gly
 95 100 105
 Asp Arg Gly Leu Gln Gly Lys Tyr Gly Lys Thr Gly Ser Ala Gly

110	115	120
Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly 125	130	135
Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val 140	145	150
Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val 155	160	165
Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met 170	175	180
Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe 185	190	195
Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His 200	205	210
Ile Met Lys Asn Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val 215	220	225
Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu 230	235	240
Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg 245	250	255
Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe 260	265	270
Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro 275	280	

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

tacaggccca gtcaggacca gggg 24

<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
cccgggtgctt gcgctgctgt gaccccggtg cctccatgta cccgg 45

<210> 82
<211> 2284
<212> DNA
<213> Homo Sapien

<400> 82
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tccttcccgc gggcgcgaca gagctgtcct cgcacctgga tggcagcagg 100
ggcgccgggg tcctctcgac gccagagaga aatctcatca tctgtgcagc 150
cttcttaaag caaactaaga ccagagggag gattatcctt gacctttgaa 200
gaccaaact aaactgaaat ttaaaatgtt ctcggggga gaaggagct 250
tgacttacac tttggtaata atttgcttcc tgacactaag gctgtctgct 300
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 tatgcaaaga aacagggttag gacatctagg ttccaattca ttcacattct 2150
 tggttccaga taaaatcaac tgtttatata aatttcta at ggatttgctt 2200
 ttctttttat atggattcct ttaaaactta ttccagatgt agttccttcc 2250
 aattaaatat ttgaataaat cttttgttac tcaa 2284

<210> 83
 <211> 431
 <212> PRT
 <213> Homo Sapien

<400> 83
 Met Phe Phe Gly Gly Glu Gly Ser Leu Thr Tyr Thr Leu Val Ile
 1 5 10 15

Ile Cys Phe Leu Thr Leu Arg Leu Ser Ala Ser Gln Asn Cys Leu	20	25	30
Lys Lys Ser Leu Glu Asp Val Val Ile Asp Ile Gln Ser Ser Leu	35	40	45
Ser Lys Gly Ile Arg Gly Asn Glu Pro Val Tyr Thr Ser Thr Gln	50	55	60
Glu Asp Cys Ile Asn Ser Cys Cys Ser Thr Lys Asn Ile Ser Gly	65	70	75
Asp Lys Ala Cys Asn Leu Met Ile Phe Asp Thr Arg Lys Thr Ala	80	85	90
Arg Gln Pro Asn Cys Tyr Leu Phe Phe Cys Pro Asn Glu Glu Ala	95	100	105
Cys Pro Leu Lys Pro Ala Lys Gly Leu Met Ser Tyr Arg Ile Ile	110	115	120
Thr Asp Phe Pro Ser Leu Thr Arg Asn Leu Pro Ser Gln Glu Leu	125	130	135
Pro Gln Glu Asp Ser Leu Leu His Gly Gln Phe Ser Gln Ala Val	140	145	150
Thr Pro Leu Ala His His His Thr Asp Tyr Ser Lys Pro Thr Asp	155	160	165
Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe Gly Ser Ser Asp	170	175	180
His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser Ala Gln Leu	185	190	195
Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln Phe Ser	200	205	210
Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser Ala	215	220	225
Leu Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala	230	235	240
Thr Pro Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr	245	250	255
Pro Ser Gly Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro	260	265	270
Val Thr Thr Val Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr	275	280	285
Val Phe Thr Arg Ala Ala Ala Thr Leu Gln Ala Met Ala Thr Thr	290	295	300
Ala Val Leu Thr Thr Thr Phe Gln Ala Pro Thr Asp Ser Lys Gly			

305	310	315
Ser Leu Glu Thr Ile Pro Phe Thr Glu	Ile Ser Asn Leu Thr Leu	
320	325	330
Asn Thr Gly Asn Val Tyr Asn Pro Thr	Ala Leu Ser Met Ser Asn	
335	340	345
Val Glu Ser Ser Thr Met Asn Lys Thr	Ala Ser Trp Glu Gly Arg	
350	355	360
Glu Ala Ser Pro Gly Ser Ser Ser Gln	Gly Ser Val Pro Glu Asn	
365	370	375
Gln Tyr Gly Leu Pro Phe Glu Lys Trp	Leu Leu Ile Gly Ser Leu	
380	385	390
Leu Phe Gly Val Leu Phe Leu Val Ile	Gly Leu Val Leu Leu Gly	
395	400	405
Arg Ile Leu Ser Glu Ser Leu Arg Arg	Lys Arg Tyr Ser Arg Leu	
410	415	420
Asp Tyr Leu Ile Asn Gly Ile Tyr Val	Asp Ile	
425	430	

<210> 84
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 84
 agggaggatt atccttgacc tttgaagacc 30

<210> 85
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 85
 gaagcaagtg cccagctc 18

<210> 86
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 86
 cgggtccctg ctcttttg 18

<210> 87
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 87
 caccgtagct gggagcgac tcac 24

<210> 88
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 88
 agtgtaagtc aagctccc 18

<210> 89
 <211> 49
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 89
 gcttctgac actaaggctg tctgctagtc agaattgcct caaaaagag 49

<210> 90
 <211> 957
 <212> DNA
 <213> Homo Sapien

<400> 90
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 gtcttcgcct ccttgytgc ctggtattcg gggtaacctgc tcgcagagct 100
 cattccagat gcacccctgt ccagtgtgc ctatagcatc cgcagcatcg 150
 gggagaggcc tgctctcaaa gctccagtcc ccaaaaggca aaaatgtgac 200
 cactggactc cctgcccatac tgacacctat gcctacaggt tactcagcgg 250
 aggtggcaga agcaagtacg ccaaaatctg ctttgaggat aaactactta 300
 tgggagaaca gctgggaaat gttgccagag gaataaacat tgccattgtc 350
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 aatccctgct cttcatggtg acctatgacg acggaagcac aagactgaat 500

9944650
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tcccttccga aattcagaga gaaaagatca accactctga tgctaagaac 650
aacagatatt ctggctggcc tgcagagatc cagatagaag gctgcatacc 700
caaagaacga agctgacact gcaggggtcct gagtaaagt gttctgtata 750
aacaatatga gctggaatcg ctcaagaatc ttatttttct aaatccaaca 800
gcccatatct gatgagtatt ttgggtttgt tgtaaaccaa tgaacatttg 850
ctagttgtat caaatcttgg taocgagtat ttttatacca gtattttatg 900
tagtgaagat gtcaattagc aggaaactaa aatgaatgga aattcttaaa 950
aaaaaaa 957

<210> 91

<211> 235

<212> PRT

<213> Homo Sapien

<400> 91

Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val
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Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu
20 25 30

Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg
35 40 45

Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg
50 55 60

Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala
65 70 75

Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile
80 85 90

Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val
95 100 105

Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn
110 115 120

Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser
125 130 135

Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu
140 145 150

Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn
155 160 165

Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg
170 175 180

Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly
185 190 195

Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser
200 205 210

Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile Gln
215 220 225

Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser
230 235

<210> 92
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 92
aatgtgacca ctggactccc 20

<210> 93
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 93
aggcttgga ctcccttc 18

<210> 94
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 94
aagattcttg agcgattcca gctg 24

<210> 95
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
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<400> 95
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